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UPDATING THE NATIONAL EMISSIONS DATA SYSTEM POINT SOURCE INVENTORY

PEDCo-Environmental Specialists, Incorporated

Prepared for:

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November 1974

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The Environmental Protection Agency (EPA) requested and received Air Pollutant Emissions Reports (APER form OMB No. 158-R75) from a number of "point source" facilities in the States of Illinois, Maryland, Michigan, Minnesota, Ohio, Pennsylvania, West Virginia, and Wisconsin. These data were used to update the National Emissions Data System (NEDS) point source emissions inventory.

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by

PEDCO-Environmental Specialists, Inc.
Suite 13, Atkinson Square
Cincinnati, Ohio 45246

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EPA Project Officer: Jacob Summers

Prepared for

ENVIRONMENTAL PROTECTION AGENCY
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Mr. Jacob Summers was the Project Officer for the Environmental Protection Agency.

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1.0 INTRODUCTION

The Environmental Protection Agency (EPA) requested and received Air Pollutant Emissions Reports (APER form OMB No. 158-R75) from a number of "point source" facilities in the States of Illinois, Maryland, Michigan, Minnesota, Ohio, Pennsylvania, West Virginia, and Wisconsin. These data were used to update the National Emissions Data System (NEDS) point source emissions inventory.

This task was performed in PEDCo offices in Cincinnati. The engineering staff evaluated APER forms for 334 facilities and prepared input data for NEDS for 319 facilities. Input was not prepared for 15 facilities because of lack of substantial information. In cases where information was judged incomplete, a note identifying missing information was attached to the APER form. A total of 2067 NEDS forms and 1738 lines of data were prepared.

Procedures followed in preparing input data for updating the NEDS point source inventory are discussed in detail in Section 2.0.

2.0 PROCEDURES

2.1 GENERAL PROCEDURES

This section describes procedures followed in preparing NEDS input data. The work involved:

a. Entering new sources in the NEDS; and

b. Updating information on sources already in the NEDS by checking information in the NEDS against the information in Air Pollutant Emission Report (APER).

The EPA furnished a printout of information in the NEDS. Existing information was checked by comparing source emission points for operating rate, design rate, control equipment and efficiency, emission estimates and other data fields on point source coding forms.

2.2 NEW SOURCES

Every available APER source was checked to see if it was in the NEDS. If a source did not appear on the printout, a set of NEDS point source coding forms were filled out. Procedures described in "Guide for Compiling a Comprehensive Emission Inventory" (APTD-1135) were employed in preparing these forms.

No information was entered on card 5 of the NEDS point source coding form. The card 5 is, however, a part of data for an emission point and it should be (with ending AP5 in

columns 78-80) in the input deck of cards.

The AQCR, plant I.D., UTM zone and coordinates will be filled out by EPA personnel. These data fields are identified by an "x" on the point source coding form in Figure 2.1.

2.3 SOURCES ALREADY IN THE NEDS

For sources listed on the printout, information was checked against the APER data.

For some sources, there were more emission points listed in APER than in the printout. In these cases, NEDS point source coding forms were filled out for additional emission points at the source. Data for emission points already listed in the printout were compared with the data in APER. When data for an emission point needed only a few changes, these changes were coded either on IBM Fortran coding forms or on NEDS forms. If a NEDS form was used to code changes, the card(s) that need be keypunched was identified with an asterisk(s). Coding procedures for deleting, adding, or changing information in the NEDS are explained later.

If it appeared that data for an emission point listed in the printout need be changed substantially, the point was deleted from the NEDS and it's new information was entered on a NEDS point source coding form.

APER forms for some sources seemed to have incomplete information; in these cases, compatible emission points in the NEDS were updated while other points were unchanged.

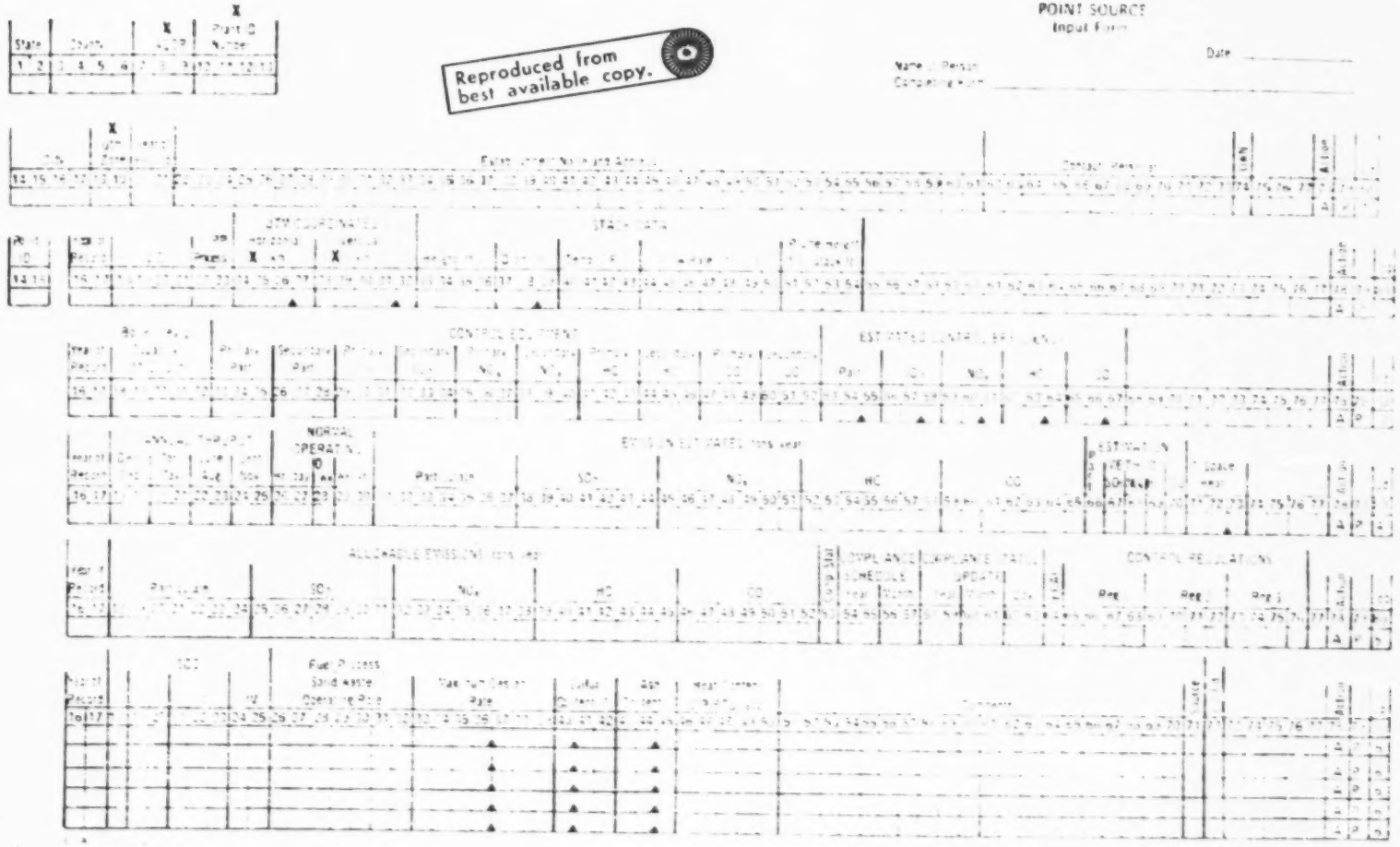

Figure 2.1 Point source coding form.

To facilitate interfacing of NEDS with other existing data systems, a Point I.D. List which relates old point I.D.s to new point I.D.s, or indicates the new status of an old point I.D., was prepared.

2.4 DELETE, ADD, AND CHANGE PROCEDURES

Procedures used in preparing IBM Fortran coding forms for updating NEDS information are presented in Table 1.1 The card number refers to the cards on the NEDS point source coding form. Identification columns identify the element of information (i.e., a card). These columns must always be filled out and no change in these columns may be made. Characters in columns 78 and 79 identify the procedure, and column 80 indicates card number. AP denotes an addition, DP denotes a deletion, and CP denotes a change.

Procedure DP1 deletes the source from the NEDS, procedure DP2 results in deletion of a particular source point, and procedure DP6 deletes a particular process of a point. Thus, if data for an emission point listed in the printout need be changed substantially, the point should be deleted from the NEDS and cards 2 through 6 should be added to the NEDS. This is conveniently done by filling out the NEDS point source coding form.

Table 1.1 CODING PROCEDURES

Card No.	Identification columns	Procedures available for updating information (columns 78-80)		
		Add	Delete	Change
1	1-13	AP1	DP1	CP1
2	1-15	AP2	DP2	CP2
3	1-15	AP3	--	CP3
4	1-15	AP4	--	CP4
5	1-15	AP5	--	CP5
6	[1-15] [18-25]	AP6	DP6	CP6